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Rural Lines

M A Y 1955





A Message from the

ADMINISTRATOR

A few days ago I had the opportunity to visit a rural electric cooperative which was observing the anniversary of its oganization. Nearly all the men and women who had served on the board during the existence of the co-op were present. At one table sat the directors who served on the first board, and as a feature on the evening's program they re-enacted the very first meeting. They went through the business of electing their first officers, selecting their corporate name, setting in motion the work leading to their first REA loan and making decisions that today have resulted in light and power for nearly all the rural families in the territory the co-op now serves.

All of us—the visitors and the co-op members present—thoroughly enjoyed this dramatic presentation of what had gone on one afternoon years ago. But nobody enjoyed it as much as the men and women who sat around that board table. Their eyes shone with pride as they got up to make the motions and conduct the business that the old minutes had recorded. And I believe the reason they were so proud of their little play was that they were proud of the work they had done to bring rural electrification to their community.

They have a right to be proud, because what they did was something no one 20 years ago believed could be done. But they—and thousands like them in communities all over the United States—did it. They set the wheels in motion to modernize rural living. And now, this year, is the time to pay tribute to these pioneers.

This year on May 11 REA will be 20 years old and next year on May 20 the Rural Electrification Act will be 20 years old. It is a fitting time for rural electric systems to pause in their work and recall those days when there were sign-up meetings, solicitations for easements, negotiations for power and all the new adventures that went into the building of businesses that today have grown (on the average) to \$2 million concerns.

I hope you as a member of this rural electric cooperative family will take time to join in whatever festivities your co-op may plan during the year. It's one way we can take our hats off to the pioneers and say thank you.

Administrator.

Ancher Welses

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Electricity on the Farm

On May 11 the REA program completes its 20th year. On that day REA and other government officials in Washington will open a year's anniversary observance of the beginning of the REA program.

During the year, ceremonies will be held by rural electric systems financed by REA, culminating on May 20, 1956—the anniversary of the passage by Congress of the Rural Electrification Act.

These celebrations will be occasions for recounting experiences in getting organizations going, loans approved, lines built, and consumers' premises connected—the end purpose of the whole effort.

Records reveal need. REA files yield some interesting correspondence from those early days.

From an Ohio farm woman came this letter soon after REA was established:

"We live in a rural district about 15 miles from Cincinnati. We have a hilly land, mostly pasture and woods. We could use electricity for lighting, pumping water, washing, refrigeration, ironing, sweeping, cooking, grinding feed, brooders and other uses too numerous to mention."

A boy in Massachusetts wrote: "I am a crippled boy of 16 who has a hard time walking about. Our well is 200 feet away from our

home and I have to climb a little hill to bring water to the house. My mother can't carry water because she is a very sick woman. If we had the electric we could have an electric pump put in our house..."

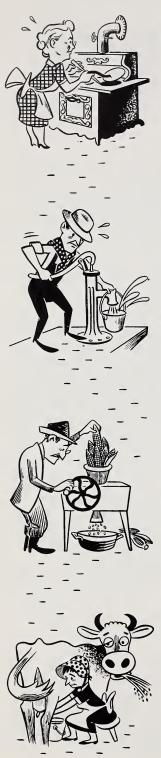
At that time the Ohio Farm Bureau said in a bulletin:

"Do we want electricity? Yes. We have been wanting it for years and years. We have tried to read by candle light and oil lamps. We have seen our farm women labor hard and long, washing and ironing clothes in the crude manner fitting a more primitive nation than the United States. We have bent our backs to tasks which can be done easily by electricity..."

Farmers act. But while people were writing letters and speeches were being made, farmers were busy in the rural communities, holding meetings and getting organizations underway.

For example, there was a state meeting in Des Moines, Iowa, on September 4 and 5 of managers of municipal plants interested in electrification of surrounding rural areas. A joint meeting of all local agencies interested in rural electrification was held in Minnesota during August. The Missouri Farmers Association canvassed four counties to get a program started. And from Indiana there was this report:

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"The Boone County Cooperative plans for rural electrification have been presented to the farming community with a very thorough canvass. Meetings were called in the schoolhouses and churches in each of the 12 townships, and volunteer crews were appointed in each township to call upon every farmer . . . The response has been remarkable . . . with 80 to 90 percent of the farm owners in some of the townships signing up."

Construction started. That was the atmosphere all over the country as the program got underway. After the organizations were set up and loans approved, construction started. Each month and each year, more and more farm people experienced the difference that electricity was making in their lives.

For farm women, adequate electric current for their homes meant their emancipation from the endless household drudgeries. It meant better and finer living conditions for the farm family. It meant a greater cash income for the farmer.

Electricity made it possible to have a pressure water system, putting an end to the constant pumping and carrying of heavy buckets of water. Running water in the farm home permitted installation of modern plumbing.

Household appliances available. The farm housewife was able in the early days of the program to take advantage of electrical equipment already developed for the urban market. And then gradually the farmer lost some of his wariness about electricity and began to experiment on putting it to work for him.

One farmer, tired of getting up in the night to bring newborn pigs into the house to keep them from freezing, dropped an electric bulb with a reflector in a corner of his hog house so the little pigs would crowd around it for warmth. Today, with the addition of infrared lamps, tens of thousands of pigs which otherwise never would survive their first week are saved for market because of the farmer's ingenuity.

Farm equipment developed. As electricity became more available, electric motor-driven feed mills began to make their appearance, small mills that could grind grain automatically, while farmers went about their business.

Cooling of milk is essential to Grade A dairy production. Thousands of farmers would not be in the business of producing high-grade milk today, especially in the South, were they not using electric coolers.

With electricity available, there's no need to make hay only while the sun shines. For a farmer can now store his hay in the barn while it is still wet, and with his own electrically powered hay-drying equipment, force air up through the hay and cure it successfully.

Production tools. Electric milking machines, pumps for irrigation and stock watering, automatic poultry waterers, electrically powered elevators, corn shellers, grinders, ensilage cutters... these are only a few of the many pieces of productive equipment available on farms today.

There are more than 400 known uses of electricity on the farm and more than half can be used to increase production or make farming more profitable.

Reports on savings. As far back as 1937, colleges and universities were making reports on studies of savings to be achieved in time, labor and money through the use of electric power. For example, a New York Agricultural Experiment Station bulletin reported that lights in the orchard would reduce the number of wormy apples by about 20 percent. . . . In Virginia, it was found that irrigation on most soils appreciably increased the size of fruit and net profits even in the normal years. . . . Missouri Experiment Station tests showed that the average time for milking a cow was reduced about 50 percent when an electric milking machine was installed.

From lights to power production tools, since 1935 farmers have doubled their use of electric energy every four years. Today, those on REA-financed lines are using about 15 billion kilowatt-hours a year. Already REA borrowers are estimating that in another 10 years they will be using 30 billion kwh. So, the farmer is really just on the threshold of the power revolution when he pauses to pay tribute to 20 years of REA.



May 1955

POWER

FOR

1975

REA Estimates Needs

Power requirements for REAfinanced electric systems are expected to double by 1965 and more than triple by 1975.

These projections are based on actual input of the systems in 1953, and are part of a study of future power needs and resources of REA borrowers. The study was originally initiated by Administrator Ancher Nelsen in response to a request by the Atomic Energy Commission early in 1954 to develop REA borrowers' power requirements by power supply areas.

Mr. Nelsen explained that it became obvious that more realistic state estimates were essential when this review of the estimates was made. The Agency is looking into the future to get facts which will be needed in studying such possibilities as interconnections of existing power sources, new generation facilities, and the use of atomic energy for power production to meet future farm electric load growth.

As compared with preliminary figures released last year, the estimated total national requirements remain the same. State figures in the current study have been worked out more fully and more accurately than last year's estimates since actual input figures for 1953 were used as a base and since the objective had been changed in this study.

In the past, power needs of REA-financed electric systems have doubled almost every 4 years. This rapid growth was due largely to new consumers coming on the lines. With more than 90 percent of the nation's farms now electrified, greater usage by present consumers is expected to be the principal factor in the increased demand for power in the future.

The following table gives the estimated power requirements of REA-financed rural electric systems by States for the years 1953, 1965 and 1975:

ESTIMATES OF REA POWER REQUIREMENTS BY STATES

STATE	TOTAL KWI	H in Millions (NET	T INPUT)*
	1953	1965	1975
Alabama	455	1,074	1,614
Arizona	125	270	420
Arkansas	240	574	876
California	186	400	586
Colorado	269	625	936
Delaware	25	51	75
Florida	159	450	704
Georgia	660	1,369	1,956
Idaho	78	170	253
Illinois	491	986	1,400
Indiana	545	1,100	1,563
Iowa	580	1,150	1,648
Kansas	282	575	816
Kentucky	551	1,336	2,030
Louisiana	172	370	552
Maine	6	10	13
Maryland	122	250	364
Michigan	175	355	511
Minnesota	701	1,484	2,144
Mississippi	527	1,200	1,788
Missouri	632	1,300	1,876
Montana	182	396	584
Nebraska	389	830	1,218
Nevada	10	25	38
New Hampshire	35	63	87
New Jersey	9	20	30
New Mexico	205	520	798
New York	17	34	49
North Carolina	393	950	1,424
North Dakota	204	480	722
Ohio	503	1,070	1,567
Oklahoma	282	705	1,075
Oregon	256	622	939
Pennsylvania	203	450	669
South Carolina	281	650	973
South Dakota	192	466	704
Tennessee	1,593	3,656	5.455
Texas	915	2,150	3,235
Utah	25	54	79
Vermont	16	30	42
Virginia	231	530	791
Washington	329	683	1,042
West Virginia	6	12	17
Wisconsin	322	685	1,002
Wyoming	90	220	335
MOM 4 I	40.222		
TOTAL	13,669	30,400	45,000

^{*} Adjusted to exclude resales, non-REA portions of jointly-financed systems, and the REA portions of certain power company and municipal systems.

You Can Order Anniversary Symbol

The anniversary symbol shown on the cover is available to borrowers in a one-column mat or a proof print which can be reproduced in offset newsletters. You may want to carry the symbol on your newsletter heading throughout the year in recognition of the 20th anniversary and use it in your advertising in local newspapers. Write to your Area Director, REA, U. S. Department of Agriculture, Washington 25, D. C.



Farm Appliance Sales and Rural Growth Boost Power Consumption

ONE LOOK at the fast-climbing power consumption curve charted by Oregon's Coos-Curry Electric Cooperative of Coquille and it's plain that something big is going on in power use.

For Coos-Curry, serving western Curry and southern Coos counties along the Pacific Ocean coastline, has made a whopping 26½ million kwh gain during the past 5 years, due to growth of rural industries and strong appliance buying.

In fact, power consumption has mushroomed so fast that the Coos-Curry board has filed an application with the State Hydro-Electric Commission and the Federal Power Commission for a preliminary permit to construct a 92,000-KW hydro plant on the Illinois River, southeast of Agness, Oregon.

Rural industry power needs. Expansion of lumber, mining and agricultural enterprises is matched by the many "Main Street" businesses springing up on the principal coast highway. And power consumption has been growing apace.

When Coos and Curry county farm leaders organized their electric cooperative in 1939, they were thinking chiefly of the 4,470 rural residents in need of adequate service. Few, indeed, guessed that in a few years industrial power consumption would figure so largely in the co-op's operations.

At the time Coos-Curry obtained its \$4,224,000 REA loan, there was only one lumber mill operating in the service area. It generated its own power and turned out a billion board feet of lumber yearly.

Today there are around 3 billion board feet of logs milled in Curry county alone. The co-op area's lumber industry now includes 21 sawmills and plywood plants.

In the Seven Devils area north of Bandon, mining interests have set up a plant for smelting black sand concentrate from ocean beaches for recovery of gold, platinum, silver, chrome, suconium (a hardening agent) and certain trace metals. The mill will use



Coos-Curry Annual Report on progress is prepared for mailing to members by office staff.

approximately 1,000 KVA's to start with.

Expanding agriculture. In the expanding agricultural field, Coos-Curry is supplying power to 85 bulb growers in the area between Brookings, Ore., and the California line. These growers raise most of the country's Easter bulbs. They use electricity for irrigation and for packing and sorting bulbs.

The 24 cranberry growers operating in coastal areas of the system produce about 1¼ million bushels a year. Farmers now have the power to run their irrigation systems and well pumps.

Dairying has also improved with the help of rural electrification. Ralph Cope, who farms near Langlois in Curry county, had one of the nation's top Jersey herds

in 1952 and 1953.

Planned program. What is behind all this growth? Effective and energetic power use planning by Manager Bruce Shavers and Charlie Brooks, power use adviser, is supplying much of the momentum for the system's steadily

growing electric load.

Mr. Brooks cooperates with the Home Demonstration Agent of Oregon State College Extension Service in working with various groups on rural electrification. Once a year they meet with group leaders to plan a series of programs and demonstrations for local farm people. Demonstrations include moisture studies, fertilization and various phases and problems of irrigation.

There are demonstrations for dairvmen on milk coolers, milking machines and barn operations. Sheepmen have received instruction on the use of electric clippers, and meetings have been held for specialty crop farmers such as bulb and cranberry growers.

The meetings and demonstrations are aimed at showing farm people how to handle jobs more effectively with electric appliances.

News stories and photos, which the county agent and Mr. Brooks send county editors, have helped keep up attendance at the power

use meetings.

Dealers cooperate. Appliance dealers and the Coos-Curry management have also worked together to stimulate electrical equipment buying in the area. Dealers, advertising in county papers, offered to give a year's free electricity to those buying ranges. The co-op backed this merchandising with newspaper ads of its own which pointed out the allaround utility and advantages of electric ranges. Such advertising has helped create a climate of popularity and preference for electric appliances.

The co-op also helped dealers by conducting an area-wide appliance survey. This was done by meter readers on their regular monthly rounds of members.

The survey showed that several million dollars worth of appliances were already being used by Coos and Curry county consumers. Of consumers queried, more than a thousand said they expected to buy a major electric appliance in the next 12 months or so. This means that a new \$250,000 potential market in appliances is open to dealers.

Coos-Curry is gradually readying its lines to meet expected heavier consumption needs in the next 5 years. One of the steps in this plan is the rephasing of feeder lines in northern Coos county.

Southwest Louisiana Electric Membership Corp., Lafayette, La., plans to connect 1,143 new rural consumers in 1955.

May 1955

Dealers Build the Load

ELECTRIC EQUIPMENT AND APPLIANCES



THEY are going to put load on the lines of Satilla Rural Electric Membership Corp., Alma, Ga., and 100 appliance dealers in the system area will do the job.

To stimulate sales, the co-op will partially reimburse dealers for installation costs. The plan was tested on a limited scale last summer and resulted in the installation of some 300 major appliances. The current campaign started in March and will end October 1.

As dealers make installations they send their reports to the rural electric system, the co-op checks the installation and writes the dealer a check. The selected units and the amount to be credited are: Electric ranges, \$25; electric water heaters, \$10; clothes driers, \$12; window air conditioning units, \$7.50; home freezers, \$7.50; electric water \$7.50; and automatic pumps, washing machines, \$7.50.

Industry council helps. The campaign will be aided by the recently formed Georgia Inter-Industry Council. Promotions and sales aids will be keyed to national campaigns being conducted by the Council.

The cooperative will provide additional cooperation through assurance of speedy installation of 3-wire service where it is required. The rural electric system plans to hold to its custom of making the installation within 3 days after the request is made.

Dealer cooperation is standard operating procedure for the Satilla REMC. The annual meeting with area dealers this spring was the 16th to be held. Dealers are the guests of the cooperative. A steak dinner, followed by frank, open discussion, takes up the evening. Some dealers drove more than 100 miles to attend. Two dealers present were guests at the first meeting 16 years ago.

Dealers are "power use men." Board President Valene Bennett looks at it this way. "The 100 dealers in our area are the same as 100 power use men working full time. Our members need electrical appliances and our system needs more load. At a conservative guess, at least half of our 12,000 members are potential customers for a major appliance right now."

Manager James P. Stafford pointed out that over the past 5

10 Rural Lines

years, average kwh consumption made regular gains of from 20 to 26 percent each year. He credited dealer activity in rural areas as one of the main elements responsible for the increases in rural power consumption.

Dealers have a sound reason for being interested. Most of them do about 80 to 85 percent of their appliance business in rural areas. H. E. "Doc" Grindle of Lumber City, Ga., is a prize example. Lumber City has a population of around 1,200 but Mr. Grindle, in competition with other dealers representing the same manufacturer in cities like Atlanta, Savannah and Macon, wins state sales contests year after year.

Major business in rural areas. He wins trips to Europe, Bermuda and other climes by selling 300 to 400 major appliances a year. He says he does at least 85 percent of his business in the rural areas served by the Satilla REMC. A licensed pharmacist, Mr. Grindle has never had any cause to regret his shift to the electric appliance and equipment field.

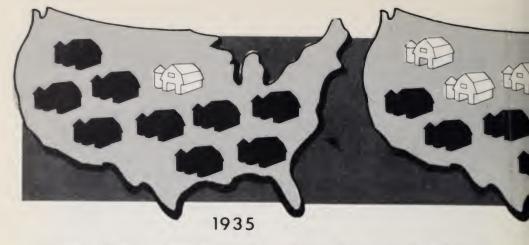
Edker McDonald, an Alma dealer of Scots descent, is another who finds rural business profitable. Business is so good, in fact, that he has time to devote to his favorite sport of fox hunting and has won national recognition. Mr. McDonald says there's a big rush on television at the present time even though reception is still spotty. Home freezers are another popular item. Electric ranges are in steady demand.

Plan offers incentive. Edsel Taylor and J. E. Taylor, Alma, find that 80 percent of the appliance sales are coming from people on the co-op lines. Both felt that the dealer payment plan would give them an incentive to work harder on their sales promotions.

J. O. Wooten, Hazelhurst, Ga., sums it up this way, "If I did not have the rural business from people on the co-op lines, I would not be in business. Business gets better all the time because people in the country know that I will service everything I sell."



Valene Bennett, president of the board of directors of the Satilla Rural Electric Membership Corp., Alma, Ga., addresses the 16th annual meeting of electric equipment and appliance dealers. Only about a third of those present are shown.



nearby. These farmers received power just 6 months after REA was created.

REA progress was slow at first. At the end of the first year, 11 REA-financed systems were serving around 700 rural consumers.

But by June 30, 1945—10 years after the start—832 systems were in operation with more than 474,000 miles of line, serving more than 114 million consumers.

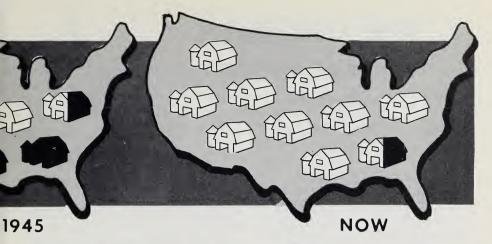
During World War II, farm people began to depend on electric power as a replacement for labor lost to the war industries and the armed forces. Since 1941, the average monthly farm use of electricity from REA-financed lines has almost quadrupled.

Today, the average REA borrower operates a \$2 million business, 1,290 miles of distribution lines serving some 4,000 rural consumers.

In 20 years, the percentage of electrified farms countrywide has been reversed. Now 9 farms in 10 have electric service. Actually, 92.3 percent of all farms were electrified as of June 30, 1954. Each month sees more farms powered with electricity than was the case the month before.

Since 1935, more than 4.200,000 farms have been connected to rural power lines by all agencies, public and private. Of these, more than half—60 percent—are served by REA borrowers.





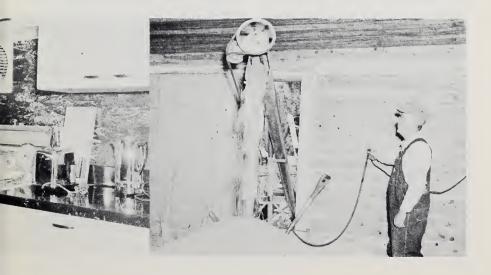
20 Years of Progress

In May 1935, farm families on 9 farms in 10 were without electricity—depending on their own muscle power for farm and home chores and on oil lamps for light.

Then came the executive order setting up the rural electrification program on May 11, 1935. That date has become a rural electrification milepost. Since that time, rural electric systems and electric companies alike have taken great strides and advances have been made both in miles of power lines and in terms of better farming and better farm living.

According to agency records the first REA loans were signed on July 22, 1935, when funds were approved for three borrowers—the Boone County Rural Electric Membership Corp., Lebanon, Ind., the Aiken Electric Cooperative, Aiken, S. Car., and the Volunteer Electric Co-op., Decatur, Tenn.

The first borrower to energize lines under REA financing was, according to the early files, the City of Dayton, Tenn., which has since repaid its loan in full. Dayton built power lines from its municipal plant to farming areas



THE LINEMAN

LCEC Crews Train for Radioactivity Detection

The Lane County Electric Cooperative, Eugene, Ore., has decided to equip its trucks with radiological detection meters and to train its crews in the use of equipment that would determine extent of radioactivity in an atomic or hydrogen bomb blast.

Harvey Roach, LCEC's safety director, spearheaded the drive to organize the first monitoring teams in the county and to integrate all utilities in a grid to make efficient use of their communications systems, transportation facilities and trained men in an emergency.

"Utilities are enthusiastic about the plan," said Roach. "Bonneville, which is already set up on a grid system, has offered to assist us."

Roach said that crews will be organized in monitoring teams of two to six men who will be trained in calibration and reading of meters and radiological detection to be given by Chief Claude W. Welch, a specialist from the U.S. Naval Training Center, Eugene.

> (From "Lane News," Lane County Electric Cooperative, Eugene, Ore.)

Spring Is Bustin' Out All Over



Spring, to the management of rural electric systems, means a new season of thriving underbrush . . . unless something is done about it.

The Maquoketa Valley Rural Electric Cooperative, Anamosa, Iowa, did something about it. Manager Edgar D. Beach put a notice in the newsletter to members asking for their cooperation in cutting underbrush. Below the request was a little coupon for the member to fill out and mail to the co-op office when he had cut the underbrush on his property along the power lines.

Each month this coupon appears, and each month the co-op runs an honor roll of members who have helped. The notice says in part:

"In the past your Cooperative has spent many thousands of dollars cutting underbrush and trimming trees under and near the power lines. Our linemen who have been trained and are qualifield to do the high trimming and removing of large trees close to the high lines SAFELY, can do a better job—if our members will keep the undergrowth from growing up under the line on their property.

"Do you know that as a nonprofit organization we would have had a lot of the above money to spend on line improvements to give you better service had you kept the brush cut under the lines?"

Teamwork on Power Use

Here's an example of power use cooperation at the local level. "Reddy Reporter", published by the Southwestern Public Service Co., Amarillo, Texas, outlines an appliance promotion program in which the company and two rural electric cooperatives which it serves at wholesale are working together to sell more electrical equipment. The co-ops are the Lighthouse Electric Cooperative, Floydada, Texas, and the Central Valley Electric Co-op, Artesia, New Mexico.

According to "Reddy Reporter", the co-ops, like the company, are



Mr. Paul Frost, manager, Central Valley Electric Cooperative, Artesia, N. Mex.



Mr. Melvin Henry, manager, Lighthouse Electric Cooperative, Floydada, Texas.

offering dealers cash bonuses for sales of electric ranges, water heaters, clothes driers and home freezers to consumers on their lines. The cash awards to dealers and their salesmen are based on the sales of all four of the appliances. The amount of cash of each award is increased if the dealer or salesman uses the appliance in his own home.

By working together, both the co-ops and the company benefit from all types of advertising—radio, newspaper, television, bill-board, car cards and window display material in dealers' stores.

Joint Promotion Pays

Perry C. Wilson, manager of the Bedford Rural Electric Cooperative, Bedford, Pa., says:

"Recently the private power company, from which we purchase our wholesale power, promoted electric clothes driers. Our cooperative was invited to join in this program. Through the advertising and merchandising that accompanies the campaign, a total of 14 electric driers were installed on our system.

"Previous to this sales campaign, we had figured clothes driers as a luxury item and that the farmer and rural resident were not too much interested. The time has come when our members are ready for driers."

E. W. Welch, Manager, Rock County Electric Cooperative, Janesville, Wis., reports that purchased power increased 1,637,368 kwh in 1954 over 1953.

POWER USE PREVIEW

Indiana Farmers See New Equipment

TEW TIME- and labor-saving electrical tools, appliances, and devices were shown farmers and their wives at a series of recent meetings sponsored by the Jackson County Kural Electric Membership Cooperative, Brownstown, Ind.

The meetings, held in North Vernon, Austin, Brownstown, and Salem, Ind., were geared to bringing farmers up-to-date on modern power use developments. Joint sponsors included the county agents of Jennings, Scott, Jackson and Washington counties and the Public Service Company of Indiana.

The two-hour afternoon meeting in the North Vernon armory is an example of the type of program planned by the sponsors.

First, farmers heard Bruce Mc-Kenzie, Purdue University, tell how electricity can decrease work and step up farm income. Then followed talks by Mrs. Esther Young, Public Service Company home service representative -"Fun with Small Appliances"; Fred Schleter, co-op power use adviser—"Farm Electric Safety"; and Robert Varvil, Public Service Company—"Do-It-Yourself Electric Tools."

Here are some of the pointers passed on to rural people:

Bruce McKenzie — Electrically heated poultry waterers and stock fountains are really paying off for farmers. Infrared heat is a good bet for chick and pig brooders and for thawing frozen meats and foods. And don't overlook heat lamps for backaches.

Mrs. Esther Young-You can cook and get home chores done a lot faster and easier by learning all of the uses of your electric ap-

pliances.

Fred Schleter—Kitchens should have a special appliance circuit in addition to the regular lighting circuit. Homes of tomorrow will have 5 to 6 appliance circuits.

Robert Varvil—Electric drills. portable saws and grinders have many practical uses in farm shops.



County Agent Claude Davis, left, and Clifford Tribbett, REMC farmer, center, watch Robert Varvil, Public Service Co., right, demonstrate mixing mill.

Out Where the Tall Corn Grows

Jackson County, Ind., is right up there with the tall corn growers. Ten farmers won medals last fall for growing more than 100 bushels to the acre on 5-acre plots. Highest figure was average of 172.8 bushels per acre. In the junior class, 5 boys topped the 100 bushel mark with the winner averaging 138.1 bushels.

WATER HEATERS BY THE CARLOAD

Flasher, N. Dak., Co-op. Helps Consumers Finance Purchases





"Sell 'em by the carload," advises N. Dak. borrower.

Manager Timpe and Mrs. C. E. Shearer, Flasher, N. Dak.

ARLOADS of hot water heaters sold to members by Mor-Gran-Sou Electric Cooperative, Inc., Flasher, N. D., are proving a potent force in building load and filling in daily power consumption valleys.

By the first of January some 450 heaters were reported sold under the co-op-financed sales plan, resulting in substantial gains in power usage.

Mor-Gran-Sou, with more than 2,900 miles of line and 3,000 customers in Morton, Grant and Sioux counties, started merchandising water heaters after obtaining approval of representative farmers and small town businessmen. Dealers hadn't sold many heaters the last few years and didn't object to the co-op's promotion plan. Dealers said, "If you can sell 'em, go to it."

Nearly four carloads of heaters have been sold to farmers by Mor-Gran-Sou. Manager Wallace Timpe, a modest, persevering man who turns out to be a "super-salesman," doesn't think there's anything unusual about the co-op's selling strategy.

"We just cooked up a plan that farmers couldn't pass up," he said.

"Farmers had been asking us for a special rate on water heaters but our board felt the rate schedule shouldn't be changed. Instead, we decided to purchase 50-gallon heaters at carload prices with money from general funds. Heaters would be given farmers who agreed to use them for 36 months at our present power rate. Farmers pay \$1 for the sales contract they enter into with the co-op. After 36 months the heater belongs to them.

"In cases where farmers already had a heater that met our specifications we allowed him \$81 or a credit of \$2.25 per month. In effect, this gives him electricity for water heating at $1\frac{1}{4}\phi$ a kilowatt-hour for the 3-year period. We follow the self-billing plan so members simply deduct the \$2.25 sum from their bill.

"We give new heater owners 36 months of free maintenance service. Each heater has a 10-year guarantee.

"Members pick up their water heaters at our co-op warehouse and pay for installation and wiring costs. If a farmer wants a larger heater, he pays the extra cost."

Mr. Timpe prefers hot water heaters to ranges as load builders, because of their "steady, longer meter pull."





E. D. H. Farrow

Back in 1936, E. D. H. Farrow, Itasca, Texas, was in the furniture business. He was persuaded to get out of the furniture business and into the electric utility business by a group of farmers. They did not have electricity and wanted him to "carry the ball" in getting service to their farms.

Mr. Farrow studied their problem, found out about the details of organization, and by January 1, 1937, discovered it would be a full time job. So he was hired. He then speedily set to work, holding meetings and working out details to complete the organization and qualify for REA financing.

That is how Mr. Farrow became a pioneer in the rural electrification program. Today, he has completed more than 18 years with the Hill County Electric Coop, Itasca, Texas—the only manager the co-op has ever had.

Under his management, the coop has achieved almost complete area coverage with construction of 1,495 miles of line, serving some 4,400 farms and ranches. During construction of the Whitney Dam on the Brazos River his co-op furnished all of the electricity required for the project.

Mr. Farrow still is working to improve living standards in rural areas. Today, in considering the future of the Hill County Co-op, he views its major problems as continued improvement in living standards, system maintenance, and load building.

Mr. Farrow has been president of the Brazos Power Co-op, Waco, Texas, since 1941, and in the past has served as director and president of the Texas Electric Cooperatives, Inc.

Mr. Farrow was born in Lexington, Texas, December 4, 1895. He is married and has a son. He saw service with the U. S. Navy during World War I. He is also active in civic affairs, being a member of the Itasca Chamber of Commerce and the Rotary Club.

REA Film on TV

A 5-minute motion picture on REA's 20th Anniversary for use on farm television programs has been produced by the U.S. Department of Agriculture. It will go out to farm TV directors in all parts of the country. Watch for it on the schedule of your local TV station.

ood equipment, maintenance and management pay off for South Carolina system.

It takes good equipment, good maintenance and good management to keep subscribers happy on a rural telephone system. If you have these you can pretty well depend on good revenues." That's the way R. F. Nickells, manager of the St. Matthews Telephone Co., at St. Matthews, S. C., sums up the situation.

The company believes in putting these principles into practice. The system serves 839 stations in a service area of 400 square miles. Magneto and common battery have all switched over to dial. For the most part rural areas get 8-party line service with a 6- and 8-minute automatic cut-off on calls.

"Keeping good records," says Nickells, "keeps us in business. We know what's going on and we can always keep things under control. The daily call record sheets permit us to chart the business for an hour, a day, a week, a month or a year all depending on what we want to find out. There's just a little extra capacity built into these lines and the call control shows me when we are reaching the point of possible overload. We just want to make sure that when our subscribers make toll or local calls the line is there for them to get their calls through in the shortest possible time.

"Our records will also show us the days when there is trouble on the line. You get that afternoon surge of business when the youngsters get home from school and start making their calls. That's a peak that might fool you unless you were able to spot the reason. You get another peak sometimes when a crew of salesmen hit town and start calling everyone in the directory from pay phones. You can tell just about what is going on from the record and that enables you to continue to give subscribers the best possible type of service."

Nickells came to the small Independent telephone field after 15 years with the Ohio Bell Telephone System. He says, "On a system the size of ours the manager has to be able to do everything. I got that type of training from Bell and I think it pays off. For example, take our two linemen-how would we ever be able to get the best results from them if we had not trained them to do their work according to Bell specifications. All three of us work together on outside jobs. At the present time all phones are installed on the same-day basis, and trouble calls are clear within the hour that they are reported."

The St. Matthews company handles around 4,000 calls a day. The staff handling the system comes to 6 people. Mr. Nickells devotes most of his time to inside equipment, going outside whenever needed. Mrs. Nickells keeps the books. Mrs. Payne does billing and records and a third

woman handles information. The two linemen do outside work.

"We keep right on adding subscribers in rural areas," Nickells says. "As soon as the word gets around that a modern system gives good service, people get interested. Of course it takes a selling job and keeping in touch with people to know their likes and dislikes. A good example helps. One farmer sold a thousand bushels of oats the first day he had his phone. He figured it would have cost him over a hundred dollars driving around to find a buyer if he had not had a phone. That's the type of thing that keeps bringing subscribers on the line.

"The way I see it, a rural system has got to be built right, the installations have to be right and the equipment has to be of the best quality. Our records show 98 trouble reports in two years and of these, 56 cases were caused by the subscriber. People leave the phone off the hook, break the cords while waxing or mopping and a dozen other things.

"A modern telephone system properly installed and managed

pays off in more ways than one. It means more revenue from toll calls—our toll call business keeps growing all the time. It also means 'cost prevention.' When we send the crew and truck 14 miles to get one phone back into operation, the cost eats up a year's revenue from that subscriber."

The company is still experimenting with public telephone booths. There are 5 booths operated out of 2 exchanges. At one end of the system, toll calls from the booth have been surprising. Investigation disclosed that farmers on another telephone system were driving 15 and 20 miles to get their calls through without hours of waiting.

Nickells says, "We just about eat, sleep, dream and think telephone 24 hours a day. I know some other Independents have been slow to use REA loans because they think REA is going to ride herd on them every minute. Well, that's not my experience. I'm mighty happy. The people are getting good modern service and the system is making money. And the future looks even brighter."

There Was a Wire on the Wire

Indignant subscriber complained to the St. Matthews Telephone Company that someone kept dialing his number for hours but never said anything. Manager R. F. Nickells located the trouble on a pole in a swamp. A loose wire was dangling on the line in such a way that when the wind blew the loose wire dialed the subscriber's number.

Progress of the Crow Wing Cooperative Rural Telephone Co. is pictured in a recent issue of the "REA Electric Buzzer," published by the Crow Wing Co-op. Power & Light Co., Brainerd, Minn.

Three pictures show hook-up of the Reuben Syhre farm. Two others show the new unattended dial exchanges at Sullivan Lake and at Freedhem. Another contrasts the new and old in line construction by a double crossarm pole pictured beside its spindly forerunner.



TELEPHONE LINES RIDE OUT TORNADO

Good quality of materials and good line construction not only make for good service, but offer your lines a better chance to survive the effects of tornado and storm damage.

That's the view of Lon J. Darley, president-manager of the REA-financed Home Telephone Company, Olive Branch, Miss.

When a tornado devastated the countryside near Olive Branch February first this year, a schoolhouse was flattened, a teacher and 2 children killed and 20 pupils injured. Parts of the levelled school (shown above) and nearby farm buildings were strewn over a wide area. In some cases structures just disintegrated and disappeared from their foundations. Tin roofing and household articles were wrapped around tree limbs along roadsides. One concrete block house and barn blew apart like a house of cards.

Plant damage light. However, one of the telephone company's plastic-coated cables, 100 feet or so from the schoolhouse, rode out the blow. Some of the company's lines were down on a stretch of road near the hardest hit farm

section, but in general outside plant damage was light.

Mr. Darley credits this survival to the quality of REA-financed outside plant construction. He adds that when poles and lines are firm and secure there's a better chance of riding out storms.

Mr. Darley says, "There were very few telephones in the rural area we serve until we obtained our \$450,000 REA loan and began extending dial service back from the main traveled roads. Only 39 phones were operating from our manually run, magneto system in Olive Branch and 37 persons were getting service from Hyhalia, 10 miles away, when I bought the property."

Dial service popular. "Dial service caught on with our rural people right from the start," he says. "When we promised them better service with automatic dial equipment, most everyone signed up and few haggled over the rate increase. Most people were glad to pay more for good service. Our old rates were: Single line, residence, \$2; business, \$4. They now pay: 1-party, residence \$4; business, \$5.25; and multi-party service, \$3."



L. J. Darley, left, president-manager, and REA Field Engineer Robert Howell discuss future construction.

Home Telephone now serves 15 little comunities. Subscribers increased from 750 at cut-over time in March 1954 to well over 1,000 to date. And during this period, long distance calls have doubled. The big job now is to fill the 100 or more orders for service.

There are good prospects too of adding another 150 subscribers in the steadily gowing agricultural area which is within easy driving distance of Memphis, Tenn. Dairies in the area supply a good share of the milk for Memphis. Main farm crops are cotton and feed. These farmers are finding the telephone an essential business tool.

Joint use of poles. Mr. Darley likes the benefits accruing from joint use pole agreements. "We've found," he says, "that our arrangement with Northcentral Mississippi Electric Power Association, Senatobia, and the Mississippi Power and Light Company to go joint use on 2,400 power poles was more economical than constructing our own pole lines and maintaining them. The power people use around 400 of our poles, too.

"Our lines would have been laid parallel to the power lines and would have cluttered the rightsof-way along roads, highways and across fields. I believe we should try to consider the appearance of our rural communities in laying out pole lines."

Home Telephone is a closely knit organization. Besides Mr. Darley, president-manager, other officers are Ben D. Mitchell, vice-president and secretary, and Mrs. Darley, treasurer. Twenty-year-old Rex B. Darley, not long out of Naval aviation, is plant superintendent.

Plain Talk

From "News of Bygone Days, 75 Years Ago," in the Memphis Commercial Appeal, Memphis, Tenn.

Nearly 100 telephones have been ordered by Memphis from Capt. S. T. Carns who has established a telephone exchange here. When telephones are put in the art of conversation will be much improved as we are being advised to use as few words as possible and to speak plainly as plain talk is best understood by the person at the other end of the line.

Dakota Central Reports

E. R. Wilson, manager of Dakota Central Rural Telephone Company, Carrington, N. Dak., says the questions most frequently asked by prospects are:

- 1. Where can we call without a toll charge?
- 2. Where are our exchange boundary lines?

He answers the second question by explaining that the area coverage design has been drawn up by the co-op engineer to try to keep centers of interest localized and the monthly rate at a minimum charge.

Some members have asked what the increase in rates would be to have the area coverage design changed so that different exchanges or towns could be called toll free. Then Mr. Wilson explains that there is no such thing as free service—if revenue is not received from toll service it will have to come from the monthly exchange service rate. Therefore, the more exchanges that can be dialed without a specific toll charge the higher the monthly rate would have to be.

A study of the necessary increase in monthly rates to give additional area service is being made. After additional cost figures have been compiled a survey will be made to determine what percentage of members desire the increase in monthly rates.

(Taken from the "Tri-County Electric News," Carrington, North Dakota.)

Ground Breaking at Calvert City, Ky.



The Calvert Telephone System held special ceremonies recently to break ground for a \$40,000 headquarters and central office building at Calvert City, Ky.

The accompanying picture shows Dan Corman, Louisville, consulting engineer for the project, turning the first spade of earth as Manager William Thomason looks on. Mr. Corman formerly was a special consultant to the Administrator of the Rural Electrification Administration.

The Calvert system's new building will be the first part of the construction of a \$600,000 plant for the Calvert City area. Present plans call for completion of the building and installation of the central office equipment during the last quarter of the year.

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LOANS APPROVED FEBRUARY 19 THROUGH MARCH 22, 1955

ELECTRIFICATION

- \$223,000 Corn Belt Electric Co-op., Bloomington, Ill.
 - 50,000 Rush County REMC, Rushville, Ind.
- 910,000 Verendrye Electric Co-op., Velva, N. Dak.
- 355,000 Tri-County Electric Co-op., St. Matthews, S. C.
- 165,000 Ninnescah Rural Elec. Co-op. Assn., Pratt, Kans.
- 100,000 Suwannee Valley Electric Co-op., Live Oak, Fla.
- 382.000 Roosevelt Co. Electric Co-op., Portales, N. Mex.
- 50,000 Roosevelt Co. Electric Co-op.,
- Portales, N. Mex. 400,000 M. J. M. Electric Co-op.,
- Carlinville, Ill. 555,000 New-Mac Electric Co-op., Neosho, Mo.
- 500,000 Henderson-Union Rural Electric Cooperative Corp., Henderson, Ky.
- 365,000 Excelsior EMC., Metter, Ga.

TELEPHONE

- \$ 57,000 Citizens Telephone Company, Lexington, S. C.
- 100,000 Orange City Telephone Com-pany, Winter Park, Fla. 373,000 Edisto Telephone Company,
- - North, S. C. 90,000 Pioneer Telephone Co-op., Philomath, Ore.
- 527,000 Millington Telephone Company, Millington, Tenn.
- 309,000 Eastern Rowan Telephone Co.,
- Granite Quarry, N. C. 117,000 North Central Washington Rural Telephone Exchange, Republic, Wash.

- 40,000 Carlton Co. Cooperative Power Association Kettle River, Minn.
- 75,000 Radiant Electric Co-op., Fredonia, Kans.
- 470,000 Vernon Electric Co-op., Westby, Wis. 755,000 Southside Electric Co-op.,
- Crewe, Va.
- 575,000 Northwestern Rural Electric Cooperative Association, Cambridge Springs, Pa.
- 465,000 San Luis Valley Rural Electric Co-op., Monte Vista, Colo.
- 140.000 Pocahontas Co. Rural Electric Co-op., Pocahontas, Iowa
- 35,000 Price Electric Co-op.,
- Phillips, Wis. 750,000 Central Missouri Electric Co-op., Sedalia, Mo.
- 485,000 Twin Co. Electric Power,
- Assoc., Hollandale, Miss. 240,000 Caney Valley Electric Co-op., Assoc., Cedar Vale, Kans.
- 257,000 Peoples Telephone Company, Collinsville, Ala.
- 500,000 Northeast Texas Telephone Co., Bogata, Texas
- 740,000 Plant Telephone & Power Co., Tifton, Ga.
- 318,000 Marion-Oak Ridge Telephone Co., Marion, La.
- 730,000 Ben Lomand Rural Telephone Co-op., McMinnville, Tenn.
- 154,000 Chequamegon Telephone Co-op., Cable, Wis.
- 128,000 Mid Century Telephone Co-op., Canton, Ill.